

COAL SYSTEMS, Inc.

CONSULTING ENGINEERS

P.O. Box 17065
SALT LAKE CITY, UTAH 84117

L. G. MANWARING, P.E.
PRESIDENT

January 2, 1981



AREA CODE 801
261-4500

Mr. Robert D. Moore, Counsel
BLACK AND MOORE
Suite 500, Ten Broadway Building
10 West, 3rd South
Salt Lake City, Utah 84101

DIVISION OF
OIL, GAS & MINING

RE: Statement of "Intention to Commence
Exploratory Drilling" by Western Tar
Sands, Inc.; Raven Ridge Project.

Dear Mr. Moore:

Western Tar Sands, Inc. proposes to develop a process for the extraction of bitumen from mined tar sands. This will entail the installation of a facility consisting primarily of a small pilot plant and a small mine.

The company has been actively pursuing the acquisition of tar sands leases which contain tar sands of sufficient quality and quantity to provide for the pilot plant and possible later commercial operations. One such lease is in eastern Utah. Small prospector samples taken from surface outcrops indicate the presence of three tar sands strata of possible satisfactory quality and quantity. It is now proposed to initiate a drilling program to verify its suitability. A description of the area and program follows:

- o As shown on the accompanying map, "Western Tar Sands, Inc. Proposed Drilling Program, Raven Ridge Project", the property of interest is in the Raven Ridge area of Uintah County, Utah.
- o Western Tar Sands, Inc. Lease Number ML22168, is in Section 16, Township 7 South, Range 25 East.
- o Accessibility to the area is via paved State Highway 45 to within one-half mile of Section 16. Access into the Section is via existing dirt roads which enter from the southwest and southeast corners.
- o Three separate zones of tar sands beds, occurring through a stratigraphic thickness of approximately 150 feet, have been identified through surface observations. The beds dip at approximately 25° to the southwest and outcrop along a northwest-southeast strike.

Handwritten notes:
Section 16
Township 7 South
Range 25 East
Raven Ridge
Project



Mr. Robert D. Moore
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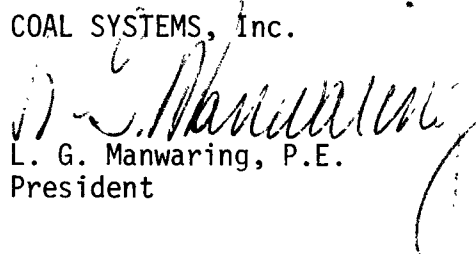
150' ap. max. between holes on
either side of road,
3 deep holes to ~ 200ft.
these are indicated 1, 2 & 3,
on map.
Rest will be same as

- o The proposed initial drilling program consists of fourteen 4 3/4"-diameter-plug holes as shown on the map. In order to obtain cores for testing purposes, close off-set holes will be drilled near at least three of the plug holes. Holes will vary from approximately 50 feet to 150 feet in depth with a total estimated footage of approximately 1850 feet.
- o Drill site locations will require some expansion of an access road as shown on the map. Ground disturbance caused by this road construction will be minimal inasmuch as only a blade-width roadway suitable for a truck-mounted-drilling rig is contemplated.
- o No significant disturbance of surface or ground waters is foreseen in this semi-arid area inasmuch as surface disturbance will be minimal and hole depths will be shallow.

I trust the above will be sufficient to obtain permission to proceed with the program.

Sincerely yours,

COAL SYSTEMS, Inc.


L. G. Manwaring, P.E.
President

LGM/bm

Attachment

cc: Mr. Louis I. Hart, Jr., President, Western Tar Sands, Inc.

○-4-3/4" INCH PLUG HOLES

WESTERN TAR SANDS, Inc.		
PROPOSED DRILLING PROGRAM		
RAVEN RIDGE PROJECT		
COAL SYSTEMS, Inc. SLC, UTAH	Scale —	Date 12/26/80
Project No. 4032	Drawn By LM	Dwg No 1